

## Claims

- [c1] A disomic cell line derived from trisomic embryos
- [c2] A stem cell line derived from said disomic cell lines of Claim 1
- [c3] A method of producing disomic cell lines consisting of the steps of:
  - a) culturing trisomic embryos onto mouse feeder cells consisting of mouse embryonic fibroblast cells (ATCC-STO) said mouse embryonic fibroblast cells having been previously mitotically inactivated by mitocimin C in gelatin-tissue culture dishes.
  - b) Maintaining said mouse feeder cells using Dulbecco's Modified Eagle Medium (DMEM) without sodium pyruvate, glucose 4500 mgL-1 supplemented with 20% fetal bovine serum, 0.1 mM  $\alpha$ -mercaptoethanol, 1% non-essential amino acids, 1 mM L-glutamine, 50 units ml L-1 penicillin.
  - c) Supplementing said medium with human recombinant Leukemia Inhibitory factor at 2000 units mL-1 and bFGF 4 ng/ml
  - d) Culturing said embryos in said medium until day 12
  - e) Fixing and analyzing by FISH said embryonic cell lines Identifying and isolating disomic cell lines within said embryonic cell lines wherein disomic cell lines are produced.
- [c4] A method of Claim 3 wherein stem cell lines are isolated from said disomic cell lines.